

Lymphocytic Choriomeningitis Virus (LCMV)

The Lymphocytic Choriomeningitis Virus (LCMV) is carried by rodents such as hamsters, guinea pigs or mice. LCMV rarely infects humans and most people with normal immune systems who are exposed to the virus do not become ill.

Symptoms of LCMV infection are similar to those for influenza and include fever, stiff neck, lack of appetite, muscle aches, headache, nausea and vomiting and occur 1–2 weeks after exposure to an infected rodent. The symptoms may be much more severe in pregnant women and people with a weakened immune system. Talk to your doctor if you are experiencing symptoms.

Although the risk of LCMV infection is very low, any individual who comes into contact with urine, feces or saliva of an infected rodent is potentially at risk for infection.

What should I do to protect myself?

People with normal immune systems should follow basic precautions to stay healthy:

- Wash hands thoroughly with soap and water after handling your pet or cleaning up droppings, cages or areas where pets have been.
- Waterless alcohol-based hand rubs should be used when soap is not available and hands are not visibly soiled.
- Keep rodent cages clean and free of soiled bedding.
- Clean cages in a well-ventilated area or outside.
- Wear rubber, latex, vinyl or nitrile gloves when cleaning the cage. Once the cage is clean of organic material, wash it with a dilute bleach solution (one and one-half cups of bleach to one gallon of water). Wash your hands after cleaning the cage, even if you have worn gloves.
- Supervise young children when handling rodents or cleaning a cage. Ensure they wash their hands immediately after handling rodents, cages or bedding.
- Do not kiss pet rodents or hold them close to your face.
- Do not allow pet rodents to come in contact with wild rodents, their droppings or nests.
- Watch pet rodents when they are not in their cages.

Who is at high risk for infection?

People who should avoid any contact with rodents or their cages include:

- Anyone with an weakened immune system because of conditions such as HIV infection, cancer treatment or organ transplant
- Pregnant women
- Women who intend to become pregnant

High risk persons should ask a family member or friend to clean the cage and care for the pet – or ask someone to temporarily adopt the pet. Pregnant women should also avoid being near a rodent for an extended period of time and are advised to keep their pet in a separate part of the

home. Although the risk of infection is low, LCMV could cause birth defects in the fetus. If rodents infest your home, they should be removed immediately. Contact your doctor if you are pregnant and exhibiting any symptoms.

How is the virus transmitted?

Wild mice are the primary host of this virus. People can become infected from exposure to urine, droppings, saliva or nesting material of infected rodents. Transmission may also occur when these materials are directly introduced into broken skin, the nose, eyes or mouth, or by a bite from an infected animal.

Pet hamsters, guinea pigs and mice can become infected with LCMV after being in contact with wild rodents at a breeding facility, pet store or your home.

There have not been any reports of person-to-person transmission, except from an infected mother to a fetus or through an organ transplant.

What is the treatment for LCMV?

Approximately 5% of the population may be infected with LCMV, but most people never show symptoms or signs of illness. Contact your doctor if you experience symptoms and have come in contact with a rodent. Severe infections may require hospitalization, but that is rare.

What should I do with my pet?

People with normal immune systems should be safe if they follow the basic precautions to stay healthy. For most people, it is not necessary to get rid of your pet rodent.

The Centers for Disease Control and Prevention does not recommend testing your pet rodent for the virus since blood tests can be inaccurate and misleading. If you no longer want to keep your pet because of a chance of infection, you may want to consider giving the pet to a friend or relative or consider human euthanasia. Pet rodents should never be released into the wild.

The Centers for Disease Control and Prevention has additional information about this virus and handling your pet at <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv.htm>.

This information was developed by the Wisconsin Department of Health and Family Services, Division of Public Health. Excerpts have been provided by the Centers for Disease Control and Prevention and the Rhode Island Health Department.